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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/627,501	07/25/2003	Heinz Zoch	032301.341	3242
25461	7590	07/06/2005	EXAMINER	
SMITH, GAMBRELL & RUSSELL, LLP 1230 PEACHTREE STREET, N.E. SUITE 3100, PROMENADE II ATLANTA, GA 30309-3592			HUANG, MEI QI	
			ART UNIT	PAPER NUMBER
			1713	

DATE MAILED: 07/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/627,501

Applicant(s)

ZOCH ET AL.

Examiner

Mei Q. Huang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-12,14,15 and 17-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-12,14,15 and 17-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Conclusion

DETAILED ACTION

1. This Office Action is in response to the Amendment filed on April 28, 2005.

Claims 1, 3, 12, 14-15, 17 and 20 have been amended, claims 2, 13 and 16 are cancelled. Claims 1, 3-12, 14-15 and 17-25 are now pending.

2. The Response of April 28, 2005 has been fully considered with the following effect:

(i) the objection to the Specification has been withdrawn in view applicant's comments; and

(ii) the prior art rejection of claims 1, 4-12, 15, and 18-25 under 35 U.S.C. 102(b) as being anticipated by Kijlstra et al. (US Pat. 5,969,002) has been obviated in view of the amendment by inserting the limitations of claims 2, 13 and 16 in claims 1, 12 and 15, respectively.

Response to Arguments

3. Applicant's arguments with respect to claims 1, 4-12, 15 and 18-25 have been considered but are moot in view of the new ground(s) of rejection.

4. The prior art rejection of claims 3, 14 and 17 under 35 U.S.C. 103(a) as being unpatentable over Kijlstra et al. (US Pat. 5,969,002) in view of Yamaguchi et al. (US Pat. 6,794,473) is maintained and applicant's arguments found unpersuasive as detailed below.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 1, 3-12, 14-15 and 17-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kijlstra et al. (US Pat. 5,969,002) in view of Yamaguchi et al. (US Pat. 6,794,473).

The prior art references to Kijlstra et al. and Yamaguchi et al. are adequately set forth in the previous Office Action dated January 26, 2005 and are incorporated herein by reference. The prior art to Kijlstra et al. is silent as to styrene-acrylic acid copolymer being used as a dispersion-supporting additive.

Yamaguchi et al. teach an acrylic acid (salt) polymer having excellent dispersibility and sufficient water solubility, and accordingly can favorably be used, for example, as pigment dispersants, etc. (column 7, line 66-67 and column 8, line 1-4). Yamaguchi et al. further disclose other monomers copolymerizable with the acrylic acid

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(salt), which can be used jointly with the acrylic acid (salt) including styrene (column 4, line 32-53) as required by newly amended claims 1, 12 and 16. Moreover, Yamaguchi et al. teach that the carboxyl group portion of the acrylic acid (salt) polymer may be in any form of an acid form, a partial salt form, a perfect salt form, and their mixture form and examples of the salt include: salt of alkaline metals, such as sodium, etc. (column 3, line 14-19) as required by Claims 3, 14 and 17. The only difference between the instantly claimed invention and that as discussed in the prior art by Yamaguchi et al. is the specific exemplification of the styrene-acrylic acid copolymer. The examiner maintains that one of ordinary skill in the art would readily appreciate styrene as a comonomer (which is one out of nineteen suitable comonomers listed at column 4, lines 32-49), which is copolymerizable with the acrylic acid (salt) to make a dispersant additive. See Yamaguchi et al.'s disclosure at column 3, lines 14-20, and column 7, line 66 to column 8, line 4.

In regarding to applicant's argument on page 7, lines 9-13, the Examiner maintains that one of ordinary skill in the art would be motivated to select styrene as a comonomer to copolymerize with the acrylic acid (salt) since it is specifically identified herein and Yamaguchi et al. disclose that acrylic acid (salt) polymer has excellent dispersibility and sufficient water solubility, and accordingly can favorably be used, for example, as pigment dispersants, etc. (column 7, line 66-67 and column 8, line 1-4). This acrylic acid (salt) polymer includes the copolymer of acrylic acid (salt) and various comonomers including styrene as discussed above.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mei Q. Huang whose telephone number is (571) 272-3549. The examiner can normally be reached on 8am - 4pm, Mon. - Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mei Q. Huang
Examiner

June 29, 2005



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SUPERVISORY PATENT EXAMINER
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